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09/879,220	06/13/2001	David Holtzman	OPI-101-CIP-II	6182

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EXAMINER
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AVELLINO, JOSEPH E

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/879,220

Applicant(s)

HOLTZMAN ET AL.

Examiner

Joseph E. Avellino *A*

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 13-55, 60, 64-69 and 71-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/9/05</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-58, and 60-90 are pending in this examination; claims 1, 26, 33, 52, 64, and 72 independent.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 2, 2005 has been entered.

#### ***Allowable Subject Matter***

3. Claims 5-8, 10-12, 56-58, and 61-63, have overcome the rejections under 35 USC 103(a) over Knight in view of Lang, however rejections under 35 USC 101 have been formulated

#### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-58, and 60-90 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Applicant is reminded that a claim

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is non statutory if it includes one of the judicial exceptions (law of nature, abstract idea, natural phenomena) and fails to produce a practical application through a physical transformation or a useful, concrete, and tangible result. See AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 50 USPQ2d 1447 (Fed. Cir. 1999).

6. In the case of claims 1-58 and 60-90, the result of the claim is non tangible. Exemplary claim 1, merely calculating the relevance of the collected messages to a topic is an abstract value. This value is not used for anything (i.e. for tracking a plurality of pseudonyms), it is merely a computation within a processor. In exemplary claims 5 and 10, the buzz score calculated is not utilized as well, merely a computation (the phrase in claim 10 "that measures relative changes in the posting activity level" is considered non-functional descriptive language and does not provide a real world result of the relative buzz score). By this rationale, the claims are rejected as being drawn to non-statutory subject matter.

7. Claims 1-58 and 60-90 are further rejected under 35 USC 101 as not being tangible. The claims are merely software, per se. Exemplary claim 1 discloses a system of software components (i.e. a message collector, which is implemented in software, and a means for processing the messages, which is a message processing program, see pages 15-16). For those claims which recite a database, it appears that in these claims a database which is merely a collection of data, not necessarily implemented with hardware, can be construed to be used in these claims. See MPEP 2106.

***Claim Rejections - 35 USC § 102***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 26, 33-36, 52, 64, and 72 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawasaki (USPN 6,539,375).

9. Referring to claim 1, Kawasaki discloses a system for processing message traffic from a plurality of electronic discussion forums (i.e. data sets) comprising:

a message collector for collecting messages (i.e. discrete unit of information newly encountered by users) from the plurality of electronic discussion forums (i.e. recognizer) (col. 4, line 62 to col. 5, line 18; col. 6, line 20-30); and

means for processing the messages based on a series of topics in order to track a plurality of pseudonyms (i.e. users) wherein the processing includes computing a numerical relevance score for a message and the relevance score rates the message to at least one topic (i.e. sports, news, health, etc.) on a numerical scale (i.e. return value is a matching rating indicating the strength or closeness of the encountered data to known data sets 21) (col. 5, lines 1-10).

10. Claims 26, 33-36, 52, 64, and 72 are rejected for similar reasons as stated above. Furthermore it is inherent to the system of Kawasaki that the system has a database, otherwise the messages would not be able to be stored.

***Claim Rejections - 35 USC § 103***

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki in view of Murakami et al. (USPN 6,978,292) (hereinafter Murakami).

Kawasaki discloses the invention substantively as described in claim 1, however does not specifically state computing a buzz score which is a function of numerical relevance scores for the at least one topic for each message in the set of messages. In analogous art, Murakami discloses another method for processing message traffic which discloses computing a buzz score which is a function of numerical relevance scores for each message in the set of messages (i.e. the total of all URL categories is found and the characteristics are calculated) (col. 2, lines 50-65). It would have been obvious to one of ordinary skill in the art to combine the teaching of Murakami with Kawasaki in order to display the characteristics on the user PC of Kawasaki, thereby enabling a user to select a chat rooms based on the chat contents as supported by Murakami (col. 2, lines 63-65).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki in view of Murakami in view of Lang et al. (USPN 6,314,420) (hereinafter Lang).

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12. Kawasaki in view of Murakami discloses the invention substantively as described in claim 2. Kawasaki in view of Murakami does not specifically state that the buzz score is a function of a numerical influence score of each of the pseudonyms. In analogous art, Lang discloses another method of processing message traffic which discloses calculating an influence score based on user surveys (col. 12, line 50 to col. 13, line 35). Although Lang does not disclose using this influence to calculate a buzz score, one of ordinary skill would find it beneficial to the system of Murakami in order to reduce the influence of postings from less reputable sources. It would have been obvious to one of ordinary skill in the art to combine the teaching of Lang with Kawasaki and Murakami in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

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***Claim Rejections - 35 USC § 103***

13. Claims 1-3, 9, 13-31, 33-55, 60, 64-69, and 71-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight et al. (USPN 6,571,234) (Hereinafter Knight) in view of Lang.

14. Referring to claim 1. Knight discloses a system for processing message traffic from a plurality of electronic discussion forums (e.g. abstract; col. 27, lines 20-29), comprising:

a message collector for collecting messages from the plurality of electronic discussion forums (col. 27, lines 20-29); and

means for processing the messages based on a series of topics in order to track a plurality of pseudonyms (i.e. authors), wherein the processing includes computing a relevance score (the Office takes the term "relevance score" to be broadly construed as "a method to disseminate messages from other messages based on a criterion") for a collected message based on at least one topic (i.e. area/class/subclass classification system for messages) (e.g. abstract; col. 22, lines 22-67).

Knight does not disclose that the processing includes computing numerical relevance scores to at least one topic. In analogous art, Lang discloses another system for processing messages which discloses computing numerical relevance scores for a collected message, and wherein the numerical relevance score rates the relevance of the collected message to at least one topic on a numerical scale (i.e. information A related to concept C based on Positive concept clues and negative concept clues) (col. 13, lines 10-35; col. 15, lines 1-10). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

15. Referring to claim 2, Knight discloses the means for processing is further adapted to compute a buzz score based on a set of messages for the at least one topic (e.g. abstract; col. 16, lines 45-55).



Knight does not disclose that the buzz score is a function of numerical relevance scores for each message in the set of messages. In analogous art, Lang discloses another system for processing messages which computes a buzz score based on a set of messages for the at least one topic, wherein the buzz score is a function of numerical relevance scores for each message in the set of messages (i.e. Author's Articles weighted by Topic) (col. 22, lines 15-40). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

16. Referring to claim 3, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose the buzz score is a function of numerical influence scores of each of the posting pseudonyms that posted the set of messages, and wherein the influence score rates the influence of the posting pseudonym on a numerical scale. In analogous art, Lang discloses another system for processing messages which discloses buzz score is a function of numerical influence scores of each of the posting pseudonyms (i.e. authors) that posted the set of messages, and wherein the influence score rates the influence of the posting pseudonym on a numerical scale (i.e. weighted sum of ratings given by users) (col. 15, lines 29-60). buzz score is a function of numerical influence scores of each of the

posting pseudonyms that posted the set of messages, and wherein the influence score rates the influence of the posting pseudonym on a numerical scale.

17. Referring to claim 9, Knight discloses the means for processing is adapted to compute a relative buzz score that measures relative changes in the posting activity level (i.e. if the author adds more messages pertaining to this topic, they will satisfy the criteria and then be added to the list) (col. 16, lines 48-55).

18. Referring to claim 13, Knight discloses the means for processing is further adapted to compute an opinion rating for a collected message (i.e. identify a classification) (e.g. abstract).

19. Referring to claim 14, Knight discloses the opinion rating is computing using a textual analysis software application (i.e. content sort routine) (col. 22, lines 7-43).

20. Referring to claim 15, Knight discloses the textual analysis software application compares a content of the collected message with a plurality of known words and phrases indicative of expressions of an opinion (i.e. opinion is taken to mean an opinion of a subject which then can be classified (col. 22, lines 7-43).

21. Claims 26-31, 33, 35-38, 52-55, 60, 64-69, and 71-75, are rejected for similar reasons as stated above. Furthermore Knight discloses computing a migration score

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providing a measurement of the movement of posting activity levels between topics or groups of topics from the series of topics (col. 20, lines 35-53).

22. Referring to claim 34, Knight discloses the invention substantively as described in claim 33. Knight furthermore discloses linking forums to associated topics (col. 9, lines 29-35). Knight in view of Lang does not specifically state using tables in the database to link forums to associated topics, however it is well known that tables are commonly used in databases and would be obvious to one of ordinary skill in the art to modify the system of Knight and Lang to include tables to further facilitate data warehousing and retrieval, thereby reducing data seek times and processing overhead.

23. Referring to claims 16, 17, and 20, Knight discloses the invention substantively as described in claim 13. Knight does not specifically disclose that the computed opinion rating is a positive and a negative sentiment score. In analogous art, Lang discloses another system for processing messages which includes computing a positive and a negative sentiment score (col. 16, lines 10-47). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

24. Referring to claims 18 and 19, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose computing an aggregate positive sentiment score for a set of collected messages. In analogous art, Lang discloses another system for processing messages which includes computing an aggregate positive sentiment score for a set of collected messages wherein it is computed according to the equation  $S_p = \sum_{i=1}^m S_{pm}$  (as applying this formula to the example given in Lang, m is the set of articles written by author K,  $S_{pm}$  is the rating of each article given by the user A or B,  $S_p$  is inherently calculated since all the ratings are added together and then divided by the total number of ratings, # in sample, to get the average rating) (col. 18, lines 18-56). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

25. Referring to claims 21 and 22, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose computing an aggregate negative sentiment score for a set of collected messages. In analogous art, Lang discloses another system for processing messages which includes computing an aggregate negative sentiment score for a set of collected messages, by computing an IRP negative vector (in the example for four articles, or messages) which can be added (i.e. summed) together to compute the threshold for the author (col. 13, lines 12-34; col. 15, lines 29-67; col. 16, lines 10-32). It would be obvious to a person of ordinary skill in

the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

26. Referring to claim 23-25, Knight discloses the invention substantively as described in claim 16. Knight does not specifically disclose the sentiment score is a net sentiment score and is further adapted to compute an aggregate net sentiment score for a set of collected messages. In analogous art, Lang discloses another system for processing messages which includes computing a net sentiment score and is further adapted to compute an aggregate net sentiment score for a set of collected messages (i.e. combining the IRP negative and positive vectors for each article in order to come up with a rating for the article) (col. 13, lines 12-34; col. 15, lines 29-67; col. 16, lines 10-32). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

27. Referring to claim 39, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose the message collector and the message categorizer is adapted to compute an influence score for the extracted pseudonym author. In analogous art, Lang discloses another system for processing messages which includes computing an influence score for the extracted pseudonym

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author (i.e. rating) (col. 13, lines 12-34; col. 15, lines 29-67; col. 16, lines 10-32). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

28. Referring to claim 40, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose the influence score is based at least in part on the impact of prior postings by the extracted pseudonym author on other pseudonym authors. In analogous art, Lang discloses another system for processing messages wherein the influence score is based at least in part on the impact of prior postings by the extracted pseudonym author on other pseudonym authors (i.e. the IRP of the author uses the average of ratings given to the author so far, and ratings given to all authors) (col. 15, lines 28-67). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

29. Referring to claim 41, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose computing a reputation score for the extracted pseudonym author. In analogous art, Lang discloses another system

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for processing messages which computes a reputation score for the extracted pseudonym author (col. 13, lines 12-34; col. 15, lines 29-67; col. 16, lines 10-32). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

30. Referring to claim 42, Knight-Lang discloses the invention substantively as described in the claims above. Furthermore, Knight-Lang does disclose the reputation score is based on a plurality of influence scores for the extracted pseudonym author under multiple local pseudonyms, however does not disclose that these local pseudonyms have been associated into a universal pseudonym. However it is well known that associating local usernames into a universal username in order for client tracking is well known and expected in the art. By this rationale, it would have been obvious to combine the local pseudonyms under a universal pseudonym in order to fully track the authors throughout different forums, regardless of what names they use, thereby increasing the likelihood that all the related information to an author will be associated with that person, rather than just the username.

31. Claims 43 and 44 are rejected for similar reasons as stated above.

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32. Referring to claim 45, Knight discloses the invention substantively as described in the claims above. Knight furthermore discloses that search robots can retrieve content from outside sources such as UseNet or other online message board systems (col. 9, lines 30-35) and recitation of numerous electronic discussion boards such as Yahoo forums, Raging Bull, Motley Fool, and others (col. 1, lines 45-60). Furthermore it is well known that Silicon Investor is a well known electronic discussion forum and would have been known to one of ordinary skill in the art with minimal research. By this rationale it would have been obvious to one of ordinary skill in the art to modify the electronic discussion forums to comprise the Raging Bull, Motley Fool, Silicon Investor, and Yahoo forums since Knight discloses that other online message board system may be used in the system as disclosed above. This would lead one of ordinary skill in the art to search for other discussion boards and eventually finding the ones recited in the claims.

33. Referring to claim 46, Knight discloses the series of topics includes stocks comprising the S&P 500 (Figure 3B).

34. Referring to claims 47 and 48, Knight discloses the group of topics corresponds to a stock index, and wherein the buzz score is computed by aggregating the buzz scores for the stocks making up the stock index (col. 16, lines 9-38).



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35. Referring to claim 49, Knight in view of Lang discloses the invention substantively as described in the claims above. Knight in view of Lang do not specifically disclose the series of topics include a plurality of movies or television shows. However it is well known that discussion forums exist for these genres and would have been obvious to one of ordinary skill in the art to modify the invention of Knight-Lang to include movies and television shows to further expand the customer market, and thereby gain users.

36. Referring to claim 50, Knight-Lang disclose the invention substantively as described above. Knight-Lang do not specifically disclose comparing the buzz score to a threshold to identify unusual discussion patterns. However it is well known to monitor and keep track of discussion patterns in order to determine what is being said during the posts (i.e. illegal activity, swearing, misuse of the system, etc). By this rationale it would have been obvious to compare the buzz score to a threshold to identify unusual discussion patterns to protect the system and further keep discussions pertaining to legal matters.

37. Claims 51, 76-90 are rejected for similar reasons as stated above.

### ***Response to Arguments***

38. Applicant's arguments filed March 2, 2005 have been fully considered but they are not persuasive.

39. Applicant argues, in substance, that (1) Lang does not teach computing an opinion rating for an electronic message since Lang gets feedback from a user and therefore does not calculate the value.

40. As to point (1) Applicant is incorrect. Although feedback is received from the user regarding the opinion of the data, the system must still compute the data. Furthermore it is stated that the concept profiles can be optimized or learned continually after their creation. See col. 13, lines 50-55. By this rationale, the rejection is maintained.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

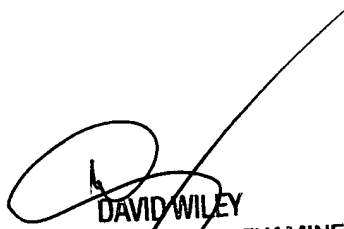
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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JEA  
March 7, 2006



DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
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